

### REMARKS

Further to Applicant's response under 37 C.F.R. § 116 filed December 20, 2004 and the Advisory Action mailed January 26, 2005, Applicant presents the following remarks, which accompany a Supplemental Information Disclosure Statement and a Request for Continued Examination under 37 C.F.R. § 1.114. Claims 1-27 are pending in this application. Claims 16-27 have been withdrawn without prejudice under 37 C.F.R. § 1.142(b)

#### *§103 Rejection of the Claims*

Claims 1-15 have been rejected under 35 USC § 103(a) as allegedly unpatentable over Steiner (U.S. Patent No. 4,925,673) in combination with Mathiowitz (U.S. Patent No. 5,271,961) and Margolin (U.S. Patent No. 6,541,606).

The Examiner has alleged in the Advisory Action that "there is nothing in Steiner to indicate that the reference teaches away from further cross-linking" and that motivation to cross-link the proteinoid microspheres of Steiner comes from the secondary references. Advisory Action at page 2. According to the Examiner, Mathiowitz is not irrelevant, because it provides motivation to modify the protein microspheres of Mathiowitz "to produce a product having enhanced or altered stability, surface reactivity [sic]." *Ibid*. This rejection is respectfully traversed.

Once again the Examiner has assumed as established precisely that which must be, and has not yet been, established, namely that the proteinoids of Steiner are equivalent to the proteins of Mathiowitz. Absent such a teaching of equivalence, Applicant submits the Examiner is comparing Applicant's apples to the cited document's oranges. Absent such a teaching of equivalence, whatever occurs in the realm of proteins is necessarily irrelevant to the realm of proteinoids. Absent such a teaching of equivalence, one cannot even argue that proteinoids can or should be cross-linked in the first place. Therefore, whatever motivation Mathiowitz may have had to cross-link his protein microspheres is irrelevant to Steiner's proteinoids.

Applicant again submits that even if one could cross-link proteinoids using the teachings of Mathiowitz and Margolin (which deal with protein microspheres and/or proteins), Steiner's disclosure would teach away from such cross-linking. A key feature of Steiner's microspheres is

their ability to dissolve in near neutral blood and thereby release pharmacological agents in a desired physiological location. See Steiner Title and col. 3, line 49 to col. 4, line 27. However, as described in Applicant's response filed December 20, 2004, one of skill in the art would not be motivated to crosslink, or otherwise modify, Steiner's proteinoid microspheres because such crosslinking would inhibit release of the pharmacological agents.

Moreover, as is known to one of skill in the art, cross-linking of proteins frequently results in insoluble products. See, for example, U.S. Patents 4,101,380 (at, e.g., column 1, line 62 et seq.) and 5,834,232 (at, e.g., column 3, lines 25-30), cited on the form PTO-1449 that accompanies the Supplemental Information Disclosure Statement. Because a key feature of Steiner's microspheres is their ability to dissolve in near neutral blood, one of skill in the art would not be motivated to apply a teaching on protein crosslinking (that threatens insolubility or inhibition of agent release) in order to "improve" an already soluble proteinoid microsphere product that satisfactorily releases its pharmacological agent. Hence, no motivation exists in the art to combine the teachings of blood-soluble proteinoids of Steiner with the crosslinking procedures described in Mathiowitz and Margolin.

Applicant submits that crosslinking the non-crosslinked proteinoid microspheres of Steiner would change their principle of operation and render them unsatisfactory for their intended purpose, either by making those microspheres insoluble or by inhibiting release of their encapsulated pharmacological agent. Such rendering of a stated purpose and changing of a stated principle of operation is explicitly prohibited under M.P.E.P. § 2143.01. Accordingly, there would have been no motivation to combine Steiner, Mathiowitz, and Margolin. Without the requisite motivation to combine, the cited documents cannot make the present claims obvious.

Withdrawal of this rejection is respectfully requested.

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (516) 795-6820 to facilitate prosecution of this application.

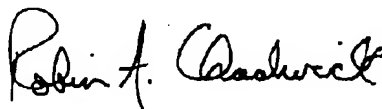
If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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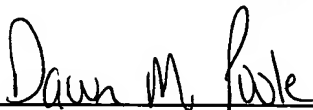


Date February 22, 2005

By \_\_\_\_\_

Robin A. Chadwick  
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**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop RCE, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 22<sup>nd</sup> day of February, 2005.



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